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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,737	09/20/2005	Johannis Alousius Zacharias Pieterse	2001-1373	6843
466	7590	11/09/2007	EXAMINER	
YOUNG & THOMPSON			VANOY, TIMOTHY C	
745 SOUTH 23RD STREET				
2ND FLOOR			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22202			1793	
MAIL DATE		DELIVERY MODE		
11/09/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/521,737	PIETERSE ET AL.
	Examiner	Art Unit
	Timothy C. Vanoy	1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 19 January 2005.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 22-59 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 25,34-36,44-46,50 and 53-59 is/are allowed.  
 6) Claim(s) 22-24,26-33,37-43,47-49,51 and 52 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 19 January 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date Jan. 19, 2005.

4) Interview Summary (PTO-413),  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

All of the foreign references in the PTO-1449 attached to the IDS filed on Jan. 19, 2005 have been lined through because the applicants have not provided a copy of each of these references to the PTO. All of these foreign references have been considered; cited on a PTO-892 and a copy of each of these foreign references are being supplied to the applicants.

***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because the reference to this application as a CIP of 09-905,486 appears to be an error. The subject matter of 09-905,486 does not appear to have any thing to do with the instant invention.

***Specification***

a) The "Brief Description of the Drawings" set forth in the applicants' specification is objected to because it does not provide a brief description of each of figures 6a and 6b, *individually*.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 47-49, 51 and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 08-164,338 A (hence "JP-338").

Claim 1 in the English translation of JP-338 describes a catalyst comprising palladium (as well as platinum and/or rhodium) and a rare earth element. Paragraph no. 0012 in the English translation of JP-338 sets forth that the catalyst may be supported on a zeolite, such as a mordenite or a beta zeolite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The person having ordinary skill in the art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22, 23, 24, 26-33; 37-43, 47-49 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 08-164,338 A (hence "JP-338") in view of the applicants' admission set forth in the "Background of invention" portion on pg. 1 of the applicants' specification.

Claim 1 in the English translation of JP-338 describes a catalyst comprising palladium (as well as platinum and/or rhodium) and a rare earth element. Paragraph

no. 0012 in the English translation of JP-338 sets forth that the catalyst may be supported on a zeolite, such as a mordenite or a beta zeolite.

Paragraph no. 4 in the English translation of JP-338 seems to disclose that hydrocarbons (i. e. "HC") are used as the reducing agent for the NOx.

Paragraph no. 0056 in the English translation of JP-338 indicates that the gas treatment temperature is 400 °C, as set forth in applicants' claims 22, 23, 24, 26-33, 37-43, 47-49 and 51-52.

The difference between the applicants' claims and JP-338 is that applicants' claims 22 and 37 specifically call for the presence of methane in the exhaust gas (whereas the English translation of JP-338 in paragraph no. 0030 only discloses the presence of C<sub>3</sub>H<sub>6</sub> in the exhaust gas).

The applicants admit on pg. 1 lns. 9-11 in their specification that exhaust gases from gas engines contain considerable amounts of uncombusted methane, sometimes up to 3% of the fuel that leaves the engine is uncombusted.

Paragraph no. 0047 in the English translation of JP-338 discloses that they have applied their process to the treatment of exhaust gases emitted from a V-6 cylinder engine in a car.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made *to have further described* the process of JP-338 *by setting forth* that the exhaust gas further contains methane, as required by at least applicants' claims 22 and 37, because the applicants admit that exhaust gases from gas engines

contain considerable amounts of uncombusted methane and inventors of JP-338 treat the exhaust gas from what appears to be the same gas engine.

The following additional foreign patents cited on the applicants' PTO-1449 submitted with their IDS filed on Jan. 19, 2005 are made of record:

JP 09-192,486 A; JP 07-323,215 A and JP 05-115,751 A.

The following additional references are made of record:

U. S. Pat. 5,494,878 disclosing a catalyst for the purification of exhaust gas that contains Pd and ceria, and

U. S. Pat. 5,811,067 disclosing the use of a palladium-containing zeolite for the purification of internal combustion engine exhaust.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy C. Vanoy whose telephone number is 571-272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Timothy C Vanoy*  
Timothy C Vanoy  
Primary Examiner  
Art Unit 1793

tcv